Part II: Background

Atlas Data

Wisconsin is a state rich in water resources. There are many thousands of streams in the state covering 41,614 perennial river miles and 42,860 miles of intermittent streams for a total of 84,474 linear stream miles. The state's many inland lakes span over 1.2 million acres. Wisconsin also has over 1,000 miles of Great Lakes shoreline on lakes Michigan and Superior, 5.3 million acres of wetlands and, with a few exceptions, a largely abundant supply of groundwater.

The task of assessing, monitoring and managing these water resources is large, and quite frequently, available data for many of the resources is outdated or non-existent. As Figure 1 below shows, Wisconsin subdivides the state by basins for the purpose of managing water resources. Management basins are a mixture of hydrologic basins at the 8-digit HUC level, county boundaries, and DNR regional boundaries. Figure 2 shows that lake assessments have been completed and entered into the state's Waterbody Assessment Display and Reporting System (WADRS) , our assessment database, for all management basins. Figure 3 shows that all of the management basins have been assessed for aquatic life use and fish consumption advisories, yet stream assessments for only a portion of the management basins have been entered into the WADRS database. The results of these assessments are discussed in Chapters 3 and 4.

Figure 1. Map of basins, counties, water management units

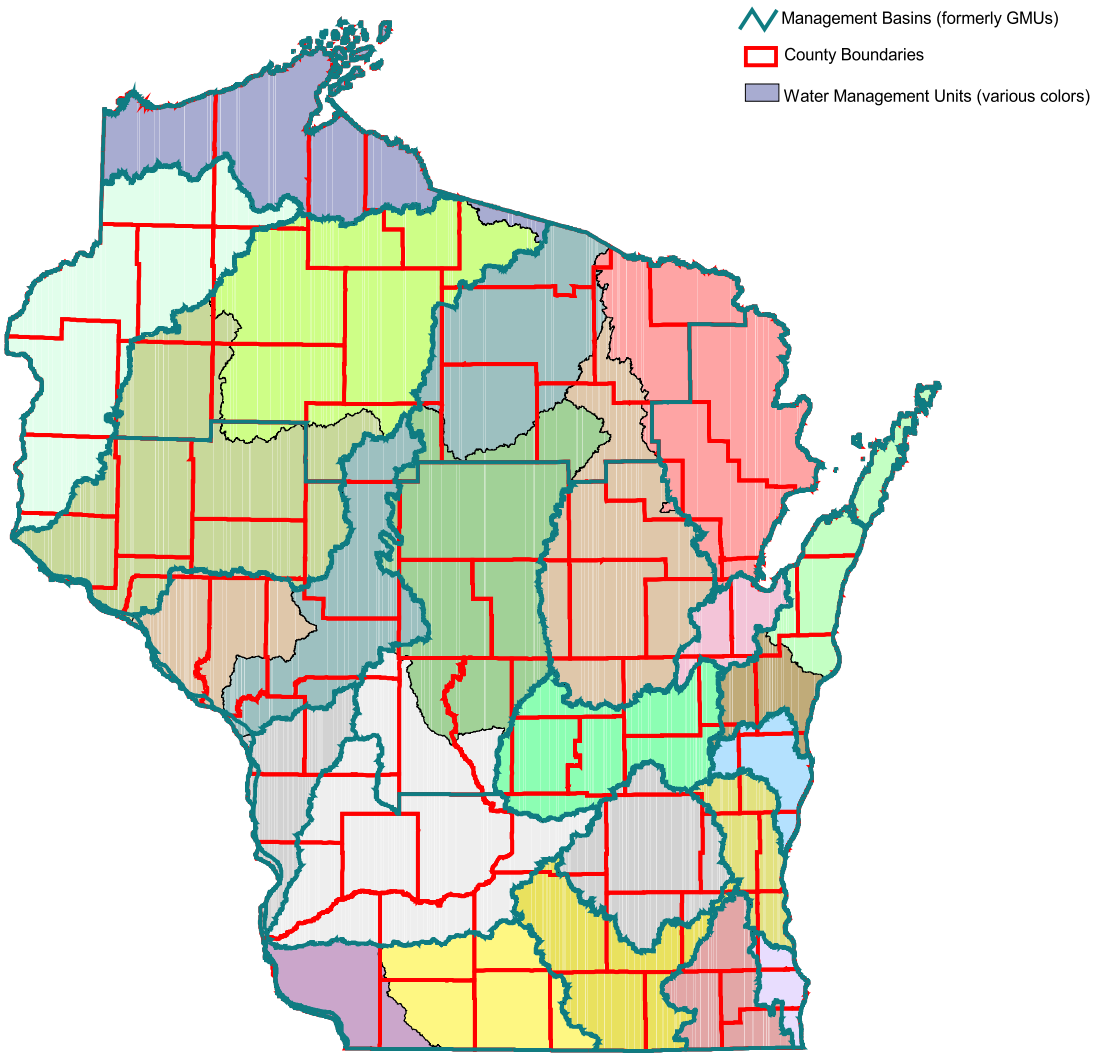


Figure 2. Lake assessments entered in database

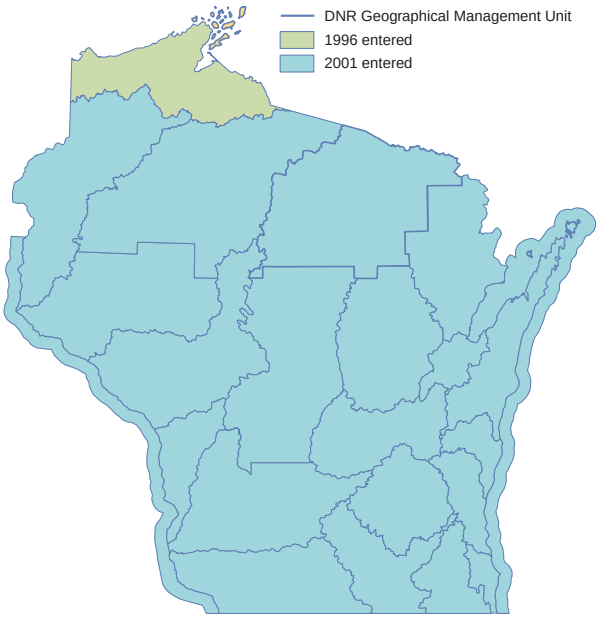
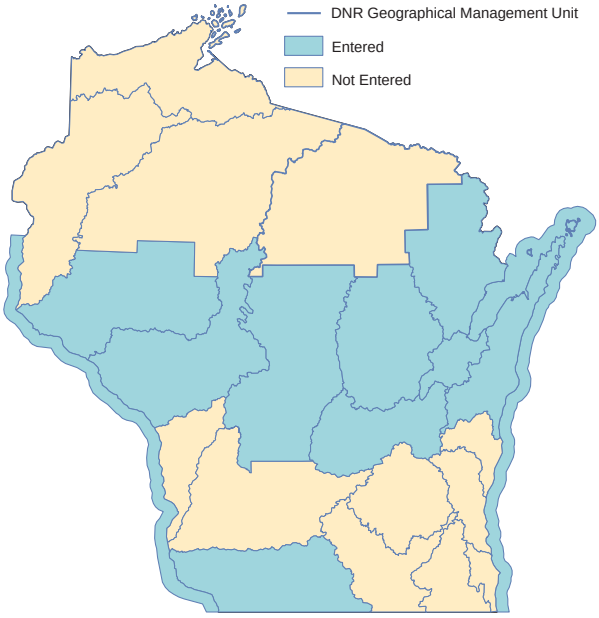


Figure 3. Stream assessments entered in the database



Protecting Our Water Heritage

Achieving the Department's goals of ecosystem protection and public health and safety involve key objectives that center on water, namely protecting the state's public trust doctrine and fully implementing the Clean Water Act. These critical areas are inter-related and both require using a Watershed Approach.

Wisconsin's Watershed Approach is an evolving framework, infusing traditional management tools (standards, regulations) with fresh ideas borne of cutting edge technology and visionary thinking. Wisconsin integrates its water programs through place-based management, using the basin as the focus of program implementation for many aspects of Clean Water Act implementation.

The Department is evolving its management programs to better integrate such diverse resource areas as water quality and quantity, surface water and groundwater, fisheries, habitat, wildlife, and forestry. Connections between water quality and resource sensitivity are being made through environmental corridor protection, shoreland management programs, and special studies that identify sensitive areas critical to pollution. Land management initiatives such as Wisconsin's Land Legacy and Ecological Landscapes (Figure 4) identify special resource areas with an eye toward aquatic sensitivity.

The Watershed Approach includes using adaptive management to continually review and adapt programs and structures to remove impediments to integration and to utilize incentive-based resource management practices where possible. The Division of Water is re-evaluating all aspects of structural and functional program implementation to better achieve the goals of clean water and protected resources for future generations. Further, the Department will continue to work with stakeholders, partners and in-place interstate initiatives to achieve these goals.

To protect and enhance our natural resources:

our air, land and water;

our wildlife, fish and forests

& the ecosystems that sustain all life.